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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,959	07/30/2003	Lawrence Bergman	YOR920030056US1(8728-607)	1793

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EXAMINER

DAO, THUY CHAN

ART UNIT	PAPER NUMBER
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2192

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/630,959		BERGMAN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Thuy Dao		2192	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to the application filed on July 30, 2003.
2. Claims 1-34 have been examined.

### **Priority**

3. The priority date considered for this application is July 30, 2003.

### **Drawings**

4. The drawings are objected to because minor informalities: hand-written text in Figures 1-4.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### **Specification**

5. The disclosure is objected to because of the following informalities: pages 19-20 have small text font size.

Appropriate correction is required.

### **Claim Rejections – 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-9 and 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,260,035 to Horvitz et al. (hereinafter "Horvitz").

#### **Claim 1:**

Horvitz discloses *a method for generating a reusable executable procedure, comprising the steps of:*

*obtaining a plurality of execution traces, wherein each execution trace represents an execution instance of a procedure (e.g., FIG. 2, blocks 50-56, col.7: 29-51; FIG. 8, blocks 112-118, col.14: 60-67);*

*aligning said execution traces to identify corresponding steps between said execution traces (e.g., FIG. 2, blocks 52-58, col.7: 52-67; FIG. 8, block 104, col.15: 1-3); and*

*processing said aligned execution traces to create a reusable executable procedure associated with said procedure (e.g., FIG. 2, blocks 56-60, col.9: 18-32, col.10: 32-58; FIG. 8, block 106, col.15: 3-8).*

#### **Claim 2:**

The rejection of claim 1 is incorporated. Horvitz also discloses *the step of obtaining an execution trace comprises monitoring and recording a sequence of actions that are performed by an individual when executing an instance of said procedure (e.g., FIG. 2, block 50, col.7: 29-51).*

**Claim 3:**

The rejection of intervening claim 2 is incorporated. Horvitz also discloses *annotating at least one action that is performed when executing an instance of said procedure* (e.g., FIG. 23, col.32: 56-67).

**Claim 4:**

The rejection of claim 1 is incorporated. Horvitz also discloses *the step of obtaining one or more execution traces comprises retrieving said execution traces from a repository* (e.g., FIG. 7, block 100 Atomic Events Source, block 102 Atomic Events Local Storage, col.12: 58 – col.13: 17).

**Claim 5:**

The rejection of claim 1 is incorporated. Horvitz also discloses *the step of processing said aligned execution traces comprises generalizing said aligned execution traces to generate said reusable executable procedure* (e.g., FIG. 2, blocks 56-60, col.9: 18-32, col.10: 32-58; FIG. 8, block 106, col.15: 3-8).

**Claim 6:**

The rejection of intervening claim 5 is incorporated. Horvitz also discloses *the step of generalizing comprises generalizing branches of procedures, generalizing iterations of procedures, generalizing recovery from failure of procedures, or generalizing variables of procedures or any combination thereof* (col.9: 32-51; col.7: 52-65).

**Claim 7:**

The rejection of claim 1 is incorporated. Horvitz also discloses *said reusable executable procedure comprises a procedure for diagnosing hardware or software in a computer system* (e.g., FIG. 6, col.12: 27-44).

**Claim 8:**

The rejection of claim 1 is incorporated. Horvitz also discloses *the step of storing said reusable executable procedure in a library of reusable executable procedures* (e.g., FIG. 7, block 106, col.14: 24-37).

**Claim 9:**

The rejection of claim 1 is incorporated. Horvitz also discloses *the step of augmenting said reusable executable procedure using an execution trace that is obtained during execution of said reusable executable procedure* (e.g., col.7: 65 – col.8: 3; col.9: 4-17).

**Claims 26-29:**

Claims 26-29 are program storage device versions, which recite the same limitations as those of claims 1, 2, 5, and 9, respectively, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 26-29.

8. Claims 1, 10, 20, 26, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,134,644 to Mayuzumi et al. (hereinafter "Mayuzumi").

**Claim 1:**

Mayuzumi discloses *a method for generating a reusable executable procedure, comprising the steps of:*

*obtaining a plurality of execution traces, wherein each execution trace represents an execution instance of a procedure* (e.g., FIG. 5, database 13, col.10: 57-64);

*aligning said execution traces to identify corresponding steps between said execution traces* (e.g., FIG. 5, sequence data forming means 15, col.10: 65 – col.11: 2; col.11: 9-15); and

*processing said aligned execution traces to create a reusable executable procedure associated with said procedure (e.g., FIG. 5, sequence data reproducing means 16, col.11: 3-8).*

**Claim 10:**

*Mayuzumi discloses a method for executing a reusable procedure, comprising the steps of:*

*launching a reusable executable procedure (e.g., FIG. 16, col.20: 15-29);  
automatically executing procedure steps associated with said reusable executable procedure (e.g., FIG. 16, S13-S17, col.20: 27: 60); and  
relinquishing control of execution of said reusable procedure to a user, when a next step of said reusable executable procedure cannot be successfully executed (e.g., FIG. 16, S18/NO and S19, col.21: 1-17).*

**Claim 20:**

*Mayuzumi discloses a system for providing technical support, comprising:  
a client device comprising an application for monitoring and recording a procedure that is performed using said client device and generating an execution trace representing an instance of said procedure (e.g., FIG. 20, blocks 50 and 60, col.26: 1-32);  
a procedure trace repository for storing execution traces (e.g., FIG. 20, block 71, col.27: 7-24); and  
a server processing a plurality of execution traces associated with instances of an executed procedure to generate a reusable executable procedure (e.g., FIG. 20, block 74, col.26: 57-65).*

**Claim 26:**

Claim 26 is a program storage device version, which recites the same limitations as those of claim 1, wherein all claimed limitations have been addressed and/or set



Art Unit: 2192

forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 26.

**Claim 30:**

Claim 30 is a program storage device version, which recites the same limitations as those of claim 10, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 30.

**Claim Rejections – 35 USC § 103**

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10-19 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz in view of US Patent No. 6,384,843 to Harel (hereinafter "Harel").

**Claim 10:**

Horvitz discloses *a method for executing a reusable procedure, comprising the steps of:*

*launching a reusable executable procedure (e.g., FIG. 12, block 156, col.18: 49-52);*

*automatically executing procedure steps associated with said reusable executable procedure (e.g., FIGs. 17-18, col.23: 20-60); and*

*relinquishing control of execution of said reusable procedure to a user (e.g., FIGs 17-18, button Cancel).*



Horvitz does not explicitly disclose *relinquishing control of execution of said reusable procedure to a user, when a next step of said reusable executable procedure cannot be successfully executed.*

However, in an analogous art, Harel discloses *[relinquishing control of execution of said reusable procedure to a user,] when a next step of said reusable executable procedure cannot be successfully executed* (e.g., FIGs. 105-108, col.26; 46-65).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teaching of Harel into that of Horvitz. One would have been motivated to do so to let the user review possible errors and last record action (FIG. 105) and/or identify a mode/parameter error (FIG. 106) as suggested by Harel.

#### **Claim 11:**

The rejection of claim 10 is incorporated. Horvitz also discloses:

*monitoring user actions while the user is executing steps of said reusable executable procedure* (e.g., FIG. 2, blocks 50-56, col.7: 29-51; FIG. 8, blocks 112-118, col.14: 60-67); *and*

*aligning said monitored user actions to said reusable procedure* (e.g., FIG. 2, blocks 52-58, col.7: 52-67; FIG. 8, block 104, col.15: 1-3); *and*

*continuing automatic execution of said reusable procedure, if said monitored steps align with said reusable procedure* (e.g., FIG. 2, blocks 56-60, col.9: 18-32, col.10: 32-58; FIG. 8, block 106, col.15: 3-8).

#### **Claim 12:**

The rejection of intervening claim 11 is incorporated. Horvitz also discloses *the step of continuing automatic execution comprises obtaining confirmation from the user to continue automatic execution of said reusable executable procedure* (e.g., FIG. 2, blocks 56-60, col.9: 18-32, col.10: 32-58; FIG. 8, block 106, col.15: 3-8).

**Claim 13:**

The rejection of intervening claim 11 is incorporated. Horvitz also discloses *comprising the step of using said monitored user actions to augment said reusable executable procedure* (col.7: 65 – col.8: 3; col.9: 4-17).

**Claim 14:**

The rejection of claim 10 is incorporated. Horvitz also discloses *the step of prompting a user for input for executing a step of said reusable executable procedure* (e.g., FIG. 23, col.24: 54-62).

**Claim 15:**

The rejection of claim 10 is incorporated. Horvitz also discloses:  
*describing a procedure step to the user* (e.g., FIG. 14, block 179, col.20: 5-55); *and*  
*automatically executing said procedure step, if execution of said procedure step is authorized by said user* (e.g., FIG. 14, block 180, col.20: 55-58).

**Claim 16:**

The rejection of claim 10 is incorporated. Horvitz also discloses:  
*describing a plurality of procedure steps for selection by the user* (e.g., FIG. 14, block 179, col.20: 5-55); *and*  
*automatically executing a procedure step selected by the user* (e.g., FIG. 1, block 56, user action(s) includes atomic events, col.7: 29-67).

**Claim 17:**

The rejection of intervening claim 15 is incorporated. Horvitz also discloses *the step of describing a procedure step to the user comprises displaying a previously recorded annotation associated with said procedure step* (e.g., FIG. 14, block 179, col.20: 5-55).

**Claim 18:**

The rejection of intervening claim 15 is incorporated. Horvitz also discloses *the step of describing a procedure step to the user comprises visually demonstrating said procedure step to the user (e.g., FIG. 12, block 156, col.18: 41-52).*

**Claim 19:**

The rejection of claim 10 is incorporated. Horvitz also discloses *the step of relinquishing control of execution of said reusable procedure to a user upon request of said user (e.g., FIGs. 17-18, button Cancel).*

**Claims 30-34:**

Claims 30-34 are program storage device versions, which recite the same limitations as those of claims 10-11, 15-16, and 19, respectively, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 30-34.

11. Claims 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz in view of US Patent No. 6,615,240 to Sullivan et al. (hereinafter "Sullivan").

**Claim 20:**

Horvitz discloses *a system for providing technical support, comprising:*

*a client device comprising an application for monitoring and recording a procedure that is performed using said client device and generating an execution trace representing an instance of said procedure (e.g., FIGs. 8-9, col.14: 60 – col.15: 8; col.17: 42-62);*

*a procedure trace repository for storing execution traces (e.g., FIG. 8, block 106, col.17: 1-8); and*

*processing a plurality of execution traces associated with instances of an executed procedure to generate a reusable executable procedure (e.g., FIG. 7, block 104, col.13: 4-17).*

Horvitz does not explicitly disclose *a server [for processing a plurality of execution traces associated with instances of an executed procedure to generate a reusable executable procedure]*.

However, in an analogous art, Sullivan further discloses *a server for processing a plurality of execution traces associated with instances of an executed procedure to generate a reusable executable procedure (e.g., FIG. 1, server 12, col.4: 56 col.5: 15).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teaching of Sullivan into that of Horvitz. One would have been motivated to do so to provide a dynamic, online, and guided self-help as suggested by Sullivan (e.g., col.2: 13-36).

**Claim 21:**

The rejection of claim 20 is incorporated. Horvitz also discloses *a library for storing reusable executable procedures (e.g., FIG. 7, block 106, col.14: 24-37).*

**Claim 22:**

The rejection of claim 20 is incorporated. Sullivan further discloses *the server distributes a reusable executable procedure to a client device comprising an execution engine for executing said reusable executable procedure (e.g. FIG. 4, blocks 102 and 106, col.10: 5-22).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teaching of Sullivan into that of Horvitz. One would have been motivated to do so as set forth in claim 20 above.

**Claim 23:**

The rejection of intervening claim 22 is incorporated. Sullivan further discloses *said reusable executable procedure is executed for upgrading software residing on the client device* (e.g., FIGs. 8-9, col.9: 56 – col.10: 5).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teaching of Sullivan into that of Horvitz. One would have been motivated to do so as set forth in claim 20 above.

**Claim 24:**

The rejection of intervening claim 22 is incorporated. Sullivan further discloses *said reusable executable procedure is executed for providing diagnostic support* (e.g., FIG. 4, block 100, col.10: 1-6).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teaching of Sullivan into that of Horvitz. One would have been motivated to do so as set forth in claim 20 above.

**Claim 25:**

The rejection of intervening claim 22 is incorporated. Horvitz also discloses *an execution engine of a client device comprises means for allowing a user to manually execute at least a portion of said reusable executable device and generating an execution trace representing said manual execution, wherein said execution trace representing said manual execution is processed by said server to augment said reusable executable procedure* (e.g., FIG. 16, col.22: 65 – col.23: 10).

**Conclusion**

12. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday – Friday from 6:30AM to 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

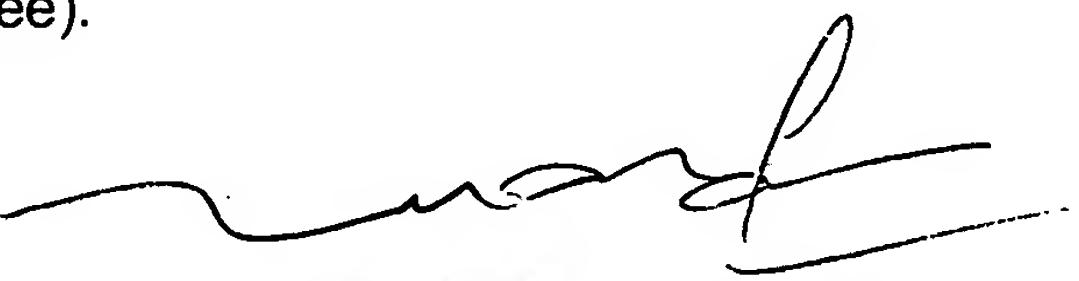
Art Unit: 2192

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM  
SUPERVISORY PATENT EXAMINER